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Figure 2-3. Comprehensive Surveillance Plan (CSP) for Safety Attribute Inspections (SAI).

CSP-SAI

The CSP-SAI is an automated tool that PI and other CMT members use to plan and record surveillance requirements for a specific air carrier. Both Airworthiness and Operations specialties must complete the CSP-SAI. Therefore, the tool is divided into two sections: Airworthiness and Operations.

CSP-SAI DESCRIPTION

The CSP-SAI is simple, yet structured, and provides the flexibility for use by many different types of air carriers. It provides a template for the PI to determine, based on data and information analysis, knowledge, and experience, the most appropriate level of surveillance for each of their air carrier elements. The CSP-SAI development gives the PI the freedom and authority to increase surveillance in problem areas and reduce surveillance in proven areas.

It is the PI's responsibility to make appropriate decisions and determinations on the surveillance requirements. However, the CSP-SAI does provide information by element that the PI can use to determine the surveillance requirements for the air carrier. This information includes the element name, the criticality baseline associated with the element, and the SAI priority associated with the sub-system.

The CSP-SAI also provides space for the PI to record the information that will form the basis for each of the individual Inspector Work Plans. This section of the CSP-SAI includes space for the initial plan SAI, the current plan SAI, the completed SAI, the remaining SAI, SAI Team members and instructions, and a space for any notes.

CSP-SAI INSTRUCTIONS

The CSP-SAI will be used by PI and the CMT to document the results of their planning activities, both annually and as required by retargeting. The rows associated with the CSP-SAI document the air carrier system elements. The PI for Operations will identify and record the system-based surveillance requirements for the Operations elements and the PIs for Maintenance and Avionics will identify and record the system-based surveillance requirements for the Airworthiness elements.

Many of the columns presented on the CSP-SAI contain either standard information provided as guidance or information auto-filled from sources throughout the process.

The *SAI Priority* column is auto-filled from the Weighted Percentage column for each sub-system on the ACAT. The *SAI Priority* column prioritizes the sub-systems; the sub-system with the greatest level of concern will have an SAI Priority of 1 and the sub-system with the least level of concern will have an SAI Priority of 10 (for Airworthiness) or 8 (for Operations).

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Considering the SAI Priority, the PI will determine which subsystems will be evaluated during the plan year. The PI will indicate which elements within the subsystem in the *Initial Plan SAIs* column. After the PI saves the CSP-SAI as "Final", the value entered into the *Initial Plan SAIs* column will AutoFill the *Current Plan SAIs* column which provides a status of current SAIs planned.

Once an SAI Inspection Record is completed, the *Completed SAIs* column in the CSP-SAI will automatically be updated to reflect that completion.

Once the *Completed SAIs* column has been filled, the *Remaining SAIs* column will be automatically computed by subtracting the *Completed SAIs* column from the *Current Plan SAIs* column. This process allows the PI to easily identify and follow the status of the SAI through completion of the CSP.

The PI enters information into the SAI Team column. Automation will provide the Plan ID, Subsystem ID/Name, and a listing of the CMT inspectors by specialty. The PI will first select a name from the list of inspectors, which will identify the SAI Team Coordinator (SAI TC). The PI will then select names from the list of inspectors identifying the additional SAI Team members. The PI will also enter any other specific instructions necessary for the SAI Team to complete the SAI inspection. Automation assigns a unique Record ID to each of the planned SAI and ensures that each inspector on the SAI Team has access to the records associated with that SAI.

The CSP-SAI also provides a Notes column where the PI can enter any general notes or comments related to the SAI inspection.

Retargeting results in a new version of the CSP-SAI. After review and/or adjustment of the ACAT, the PI may enter a new number in the *Current Plan SAIs* column to reflect the new number of SAI inspections to be completed for each element for the plan year. Automation updates the *Remaining SAIs* column based on the new *Current Plan SAIs* column.

If any SAI inspections are added as a result of retargeting, automation will assign a unique SAI Record ID to the inspection and the PI enters the applicable information in the SAI Team column. The Initial Plan SAIs column will never change from the initial number entered for the plan year. Therefore, the PI has the capability to track what was planned initially and any changes made due to retargeting.

The detailed descriptions and instructions for completing the CSP-SAI are presented on the following pages:

Ітем	<u>CSP-SAI</u> DESCRIPTION/INSTRUCTIONS
CRITICALITY BASELINE	 This column identifies the level of criticality that has been defined as the standard for each element. It will be categorized as High, Medium, or Low. High = A high likelihood that a failure in this element could lead to an unsafe condition. Medium = A moderate likelihood that a failure in this element could lead to an unsafe condition. Low = A low likelihood that a failure in this element could lead to an unsafe condition.
ELEMENTS	This column identifies the Operations or Airworthiness elements of the air carrier systems and sub-systems.
SAI PRIORITY	This column identifies a priority for each subsystem determined from the WEIGHTED PERCENTAGE column on the ACAT. This SAI PRIORITY prioritizes the fourteen sub-systems: the sub-system with the greatest level of concern will have an SAI Priority of 1 and the sub-system with the least level of concern will have an SAI Priority of 10 (for Airworthiness) or 8 (for Operations).
INITIAL PLAN SAIS	The PI enters the number of SAIs initially planned to be completed for each element for the plan year.
CURRENT PLAN SAIS	This column identifies the current number of SAIs to be completed for each element for the plan year. The PI enters any changes made in the number of SAIs, due to retargeting, in this column.
COMPLETED SAIS	This column identifies the number of SAIs that have been completed for each element for the plan year.
REMAINING SAIS	This column identifies the number of SAI inspections left to be completed for each element for the plan year.
SAI TEAM	From a drop-down listing of CMT inspectors by specialty, the PI will first select an inspector for the SAI TC role. The PI will then select the additional SAI Team inspectors. The PI will also enter any other specific instructions necessary.

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Notes

The PI may enter any additional comments in this column.

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) **AIRWORTHINESS** Air Carrier Designator _____ Air Carrier **ELEMENTS** Criticality SAI Initial Current Completed Remaining SAI Team Notes **SAIs** Baseline³ **SAIs Priority** Plan Plan SAIs SAIs 1.0 AIRCRAFT CONFIGURATION CONTROL 1.1 Aircraft 1.1.1 Aircraft Airworthiness High Requirements 1.1.2 Appropriate Operational Medium Equipment **TBD** 1.1.3 Special Flight Permits 1.2 **Records and Reporting Systems** Airworthiness Release or Log High 1.2.1 **Book Entry** Major Repairs and Alterations 1.2.2 Medium Maintenance Log/Recording High 1.2.3 Requirements Low 1.2.4 MIS Reports

^{*}High A high likelihood that a failure in this element could lead to an unsafe condition.

Medium A moderate likelihood that a failure in this element could lead to an unsafe condition.

Low A low likelihood that a failure in this element could lead to an unsafe condition.

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) AIRWORTHINESS

Air Carrier _						Air Carrier Des	ignator		
Criticality Baseline*		ELEMENTS	SAI Priority	Initial Plan SAIs	Current Plan SAIs	Completed SAIs	Remaining SAIs	SAI Team	Notes
Low	1.2.5	Mechanical Reliability Reports (MRR)							
Low	1.2.6	Aircraft Listing							
	1.3	Maintenance Organization							
High	1.3.1	Maintenance Program							
High	1.3.2	Inspection Program							
High	1.3.3	Maintenance Facilities/Main Maintenance Base							
High	1.3.4	RII							
High	1.3.5	MEL/CDL/Deferred Maintenance							
High	1.3.6	AD Management							
High	1.3.7	Outsource Organization							
High	1.3.8	Control of Calibrated Tools and Test Equipment							
High	1.3.9	Engineering/Major Repairs and Alterations							
High	1.3.10	Parts/Material Control/SUP							
High	1.3.11	Continuous Analysis and Surveillance (CAS)							
High	1.3.12	SFAR36							

Manuals

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) **AIRWORTHINESS** Air Carrier Air Carrier Designator **ELEMENTS** Criticality SAI Initial Current Completed Remaining SAI Team Notes Baseline SAIs Priority Plan Plan SAIs SAIs SAIs High 1.3.13 DAS 1.3.14 GMM/Equivalent Low Reliability Program Medium 1.3.15 Fueling Medium 1.3.16 Weight and Balance Program 1.3.17 High 1.3.18 De-Icing Program High Lower Landing Minimums 1.3.19 Low 1.3.20 Engine Condition Monitoring **TBD** 1.3.21 Parts Pooling **TBD** Parts Borrowing 1.3.22 TBD 1.3.23 Short-term Escalations TBD 1.3.24 CASE TBD 2.0 **MANUALS** 2.1 **Manual Management** Medium 2.1.1 Currency Medium 2.1.2 Content Consistency Across

Low

4.4.2

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) **AIRWORTHINESS** Air Carrier Designator Air Carrier **ELEMENTS** Criticality Completed Remaining SAI Initial SAI Team Current Notes Baseline Priority Plan Plan SAIs SAIs SAIs SAIs 2.1.3 Distribution Medium Medium 2.1.4 Availability Medium 2.1.5 Supplemental Operations Manual Requirements PERSONNEL TRAINING AND QUALIFICATIONS 4.0 4.1 **Maintenance Personnel** Qualifications RII Personnel High 4.1.1 Medium 4.1.2 Maintenance Certificate Requirements 4.2 **Training Program** Maintenance Training Program High 4.2.1 4.2.2 High **RII Training Requirements** Simulators/Training Devices Low 4.2.8 4.4 **Mechanics and Repairmen** Certification Low 4.4.1 Recency of Experience

Display of Certificate

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) **AIRWORTHINESS** Air Carrier Air Carrier Designator **ELEMENTS** Criticality SAI Initial Current Completed Remaining SAI Team Notes Baseline Plan SAIs SAIs Priority Plan SAIs SAIs Privileges - Airframe and Low 4.4.3 Powerplant Privileges and Limitations for 4.4.4 Low Repairmen 5.0 ROUTE STRUCTURES 5.1 **Approved Routes and Areas** Line Stations (Servicing and Medium 5.1.1 Maintenance) 5.1.2 Weather Reporting / SWARS Medium Non-Federal NAVAIDs Medium 5.1.3 5.1.4 Altimeter Setting Sources Low TBD 5.1.8 **ETOPS TBD** 5.1.9 **RVSM** Authorization 6.0 AIRMAN AND CREWMEMBER FLIGHT, REST, AND DUTY TIME 6.2 **Maintenance Personnel** Low 6.2.1 Maintenance Duty Time 7.0 TECHNICAL ADMINISTRATION

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	COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) AIRWORTHINESS										
Air Carrier _	Air Carrier Air Carrier Designator										
Criticality Baseline*		ELEMENTS	SAI Priority	Initial Plan SAIs	Current Plan SAIs	Completed SAIs	Remaining SAIs	SAI Team	Notes		
	7.1	Key Personnel									
Low	7.1.1	Director of Maintenance									
Low	7.1.2	Chief Inspector									
Low	7.1.3	Director of Safety									
Low	7.1.6	Maintenance Control									

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) **OPERATIONS** Air Carrier Designator Air Carrier **ELEMENTS** Criticality SAI Initial Current Completed Remaining SAI Team Notes Baseline* **Priority** Plan Plan **SAIs SAIs SAIs SAIs** 1.0 AIRCRAFT CONFIGURATION CONTROL 1.1 Aircraft Appropriate Operational Medium 1.1.2 Equipment 2.0 **MANUALS Manual Management** 2.1 Medium 2.1.1 Currency Content Consistency Across Medium 2.1.2 Manuals Medium 2.1.3 Distribution Medium 2.1.4 Availability

A low likelihood that a failure in this element could lead to an unsafe condition.

^{*}High A high likelihood that a failure in this element could lead to an unsafe condition.

Medium A moderate likelihood that a failure in this element could lead to an unsafe condition.

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) **OPERATIONS** Air Carrier Designator _____ Air Carrier **ELEMENTS** SAI Team Criticality SAI **Initial** Completed Remaining Notes Current Baseline **Priority** Plan Plan **SAIs SAIs SAIs** SAIs Medium 2.1.5 Supplemental Operations Manual Requirements 3.0 FLIGHT OPERATIONS **Air Carrier Programs and** 3.1 **Procedures** Passenger Handling Medium 3.1.1 Flight Attendant Duties/Cabin Medium 3.1.2 Procedures Airman Duties/Flight Deck 3.1.3 High Procedures Operational Control 3.1.4 Medium Medium 3.1.5 Carry On Baggage Exit Seating Medium 3.1.6 3.1.7 De-Icing Program High Carriage of Cargo 3.1.8 High Aircraft Performance Operating High 3.1.9 Limitations Lower Landing Minimums Low 3.1.10 3.1.11 Computer Based Record Keeping TDB

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) OPERATIONS

Air Carrier _						Air Carrier Design	aator		
Criticality Baseline*		ELEMENTS	SAI Priority	Initial Plan SAIs	Current Plan SAIs	Completed SAIs	Remaining SAIs	SAI Team	Notes
TBD	3.1.12	HAZMAT / Dangerous Goods Program							
TBD	3.1.13	Other Personnel with Operational Control							
	3.2	Operational Release							
High	3.2.1	Dispatch or Flight Release							
High	3.2.2	Flight/Load Manifest/Weight and Balance Control							
High	3.2.3	MEL/CDL Procedures							
	4.0	PERSONNEL TRAINING AND	QUALIFICATI	ONS					
	4.2	Training Programs							
High	4.2.3	Training of Flight Crewmembers							
High	4.2.4	Training of Flight Attendants							
High	4.2.5	Training of Dispatcher							
High	4.2.6	Training of Station Personnel							
High	4.2.7	Training of Check Airman and Instructors							
High	4.2.8	Simulators/Training Devices							

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) **OPERATIONS** Air Carrier Designator Air Carrier **ELEMENTS** SAI Team Criticality SAI **Initial** Completed Remaining Notes Current Baseline **Priority** Plan Plan **SAIs SAIs SAIs** SAIs High 4.2.9 Outsource Crewmember Training 4.2.10 High Aircrew Designated Examiner Training of Flight Followers TBD 4.2.11 **Crewmember and Dispatch** 4.3 **Qualifications** Pilot Operating Medium 4.3.1 Limitations/Recent Experience 4.3.2 Appropriate Medium Airman/Crewmember Checks and **Oualifications** Advanced Qualification Program TBD 4.3.3 (AQP) 5.0 ROUTE STRUCTURES **Approved Routes and Areas** 5.1 5.1.5 Station Facilities Medium Use of Approved Routes, Areas Low 5.1.6 and Airports TBD 5.1.7 Special Navigation Areas of Operation

COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) OPERATIONS Air Carrier Designator ______

Criticality Baseline*		ELEMENTS	SAI Priority	Initial Plan SAIs	Current Plan SAIs	Completed SAIs	Remaining SAIs	SAI Team	Notes
TBD	5.1.8	ETOPS							
TBD	5.1.9	RVSM Authorization							
	6.0	AIRMAN AND CREWMEMBER	R FLIGHT, RE	ST, AND DU	TY TIME				
	6.1	Airman and Crewmember Limitations for Domestic, Flag, Supplemental, and Commercial							
Medium	6.1.1	Scheduling/Reporting System							
Medium	6.1.2	Flight Crewmember Flight/Duty/Rest Time							
Medium	6.1.3	Flight Attendant Duty/Rest Time							
Medium	6.1.4	Dispatcher Duty/Rest Time							
	7.0	TECHNICAL ADMINISTRATIO	ON						
	7.1	Key Personnel							
Low	7.1.3	Director of Safety							
Low	7.1.4	Director of Operations			_				
Low	7.1.5	Chief Pilot							

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	COMPREHENSIVE SURVEILLANCE PLAN - SAFETY ATTRIBUTE INSPECTION (SAI) OPERATIONS										
Air Carrier _	Air Carrier Air Carrier Designator										
Criticality Baseline*		ELEMENTS	SAI Priority	Initial Plan SAIs	Current Plan SAIs	Completed SAIs	Remaining SAIs	SAI Team	Notes		
	7.2	Other Programs									
TBD	7.2.1	Safety Program (Ground and Flight)									